

Abstract of the Invention

A bone repair material is described that is of putty-like consistency, particularly useful for repairing dental bony defects such as those caused by bone loss resulting from moderate or severe periodontitis, augmenting of bony defects of the alveolar ridge, filling tooth extraction sites, or sinus elevation grafting. The repair material includes a porous, resorbable particulate that is bone-derived or derived from bone-like hydroxyapatite or synthetic hydroxyapatite; and, a resorbable carrier, such as high molecular weight polysaccharides, such as hyaluronic acid. A high concentration of particulate in the putty enhances bone repair and requires a high concentration of carrier to retain the putty at the defect site. For a particulate density of about 1.2 g/cc such as PEPGEN P-15® Bone Graft, a preferred formulation comprises about 55% percent by weight of the putty suspended in a hyaluronic acid gel of about 1.4×10^6 daltons molecular weight and a final concentration of about 56 mg/cc which material adheres to a bony periodontal defect and does not excessively expand or migrate from the defect when held in place by a conventional flap closure.